

Pennsylvania Public School Employees' Retirement System

Roster of Investment Managers, Advisors, and Consultants

As of September 30, 2019

List of PSERS' Internally Managed Investment Portfolios

- Bloomberg Commodity Index Overlay
- Gold Fund
- Infrastructure Index
- LIBOR-Plus Short-Term Investment Pool
- MSCI All Country World Index ex. US
- Premium Assistance
- Private Debt Internal Program
- Private Equity Internal Program
- Private Markets and Real Estate Pennsylvania In-House Co-Investment Program
- Public Markets In-House Co-Investments Program
- Private Real Estate Internal Program
- REIT Index
- Risk Parity
- S&P 400 Index
- S&P 500 Index
- S&P 600 Index
- S&P MLP Index
- Short-Term Investment Pool
- Treasury Inflation Protection Securities
- U.S. Core Plus Fixed Income
- U.S. Long Treasuries
- U.S. Treasuries

List of PSERS' External Investment Managers, Advisors, and Consultants

Absolute Return Managers

- Aeolus Capital Management, Ltd.
- AKAZ Investment Partners, L.P
- Bridgewater Associates, LP
- Brigade Capital Management
- Capula Investment Management, LLP
- Carlyle Aviation Management Limited
- Caspian Capital, LP
- Falko Regional Aircraft Limited
- Garda Capital Partners, LP
- HS Group Ltd.
- Independence Reinsurance Partners GP, LLC
- Nephila Capital, Ltd.
- Oceanwood Capital Management, Ltd.
- One William Street Capital Management, LP
- Pacific Investment Management Company, LLC
- Perry Capital, LLC
- Two Sigma Advisors, LP
- Venor Capital Management, LP

Publicly-Traded Real Estate Securities Advisors

- Security Capital Research & Management, Inc.

Non-U.S. Equity Managers

- Acadian Asset Management, LLC
- Baillie Gifford Overseas, Ltd.
- BlackRock Institutional Trust Company, N.A.
- Cederberg Capital
- Effissimo Capital Management Pte. Ltd.
- Marathon Asset Management Limited
- Oberweis Asset Management, Inc.
- QS Batterymarch Financial Management, Inc.
- Steadview Capital Partners, LP
- The Children's Investment Fund, LP
- Wasatch Advisors, Inc.

Commodity Managers

- Denham Capital Management, LP
- Gresham Investment Management, LLC
- Wellington Management Company, LLP

Global Fixed Income Managers

U.S. Core Plus Fixed Income Managers

- BlackRock Institutional Trust Company, N.A.
- SEI Investment Management Corporation

High Yield/Private Credit Managers

- Apollo Global Management, LLC
- Avenue Capital Group
- Bain Capital Credit, LP
- Brigade Capital Management
- The Carlyle Group
- Cerberus Business Finance, LLC
- Clearlake Capital Group, LP
- Hayfin Capital Management LLP
- Intermediate Capital Group PLC
- LBC Credit Management, LP
- Mariner Investment Group, LLC
- Oaktree Capital Management, LP
- Pacific Investment Management Company, LLC
- Park Square Capital, LLC
- SSG Capital Management Limited
- Summit Partners
- TCI Fund Management Limited
- TPG Sixth Street Partners
- Vårde Partners, Inc.

Non-U.S Developed Markets Fixed Income Managers

- AllianceBernstein, LP

Emerging Markets Debt Managers

- Franklin Templeton Investments

Multi-Sector Fixed Income Manager

- Pacific Investment Management Company, LLC

Non-U.S. Inflation-Linked Securities Manager

- Bridgewater Associates, LP

LIBOR-Plus Short-Term Investment Pool Managers

- Capula Investment Management, LLP
- Penn Mutual Asset Management, LLC
- Radcliffe Capital Management

Master Limited Partnership Managers

- Atlantic Trust Private Wealth Management
- Harvest Fund Advisors, LLC
- Salient Capital Advisors, LLC

Currency Hedging Manager

- Pareto Investment Management, Ltd.

Risk Parity Managers

- BlackRock Institutional Trust Company, N.A.
- Bridgewater Associates, LP
- D.E. Shaw Investment Management, LLC

Real Estate Advisors

- Bell Partners, Inc.
- Charter Oak Advisors, Inc.
- GF Management, Inc.
- L&B Realty Advisors
- Property Management, Inc.

Real Estate Fund Managers

- Almanac Realty Investors, LLC
- Angelo, Gordon & Co., LP
- Ares Management, LLC
- Avenue Capital Group
- Bell Partners, Inc.
- BlackRock Real Estate
- Blackstone Group, The
- Brookfield Asset Management, Inc.
- Cabot Properties, Inc.
- The Carlyle Group
- C-III Capital Partners, LLC
- DRA Advisors, LLC
- Equus Capital Partners, LTD
- Exeter Property Group
- Fortress Investment Group
- LAI Real Estate Investors, LLC
- LaSalle Mortgage Real Estate Investors
- LEM Capital Partners, LP
- O'Connor Capital Partners
- Paramount Group, Inc.
- PGIM Real Estate
- RCG Longview Management, LLC
- Silverpeak Real Estate Partners
- Stockbridge Capital Partners
- Strategic Partners
- UBS Realty Investors, LLC

Farmland Advisor

- Prudential Agricultural Group

Venture Capital Fund Managers

- Adams Capital Management, Inc.
- Aisling Capital, LLC
- Cross-Atlantic Capital Partners
- Insight Venture Management, LLC
- KBL Healthcare
- Landmark Partners
- LLR Partners
- Mid-Atlantic Venture Funds
- Psilos Group Investors
- Quaker Bio-Ventures, Inc.
- Sante Ventures
- SCP Private Equity Partners
- StarVest Associates
- Sterling Partners
- Strategic Partners
- Summit Partners
- TDH, Inc.
- Tenaya Capital

Private Equity Fund Managers

- Actis LLP
- APAX Partners, LLP
- Bain Capital Partners, LLC
- Baring Private Equity Asia Limited
- Blue Point Capital Partners LLC
- Bridgepoint Capital Ltd
- Capital Group
- L Catterton Management Company LLC
- Cinven
- Collier Investment Management LTD
- Crestview Advisors LLC
- CVC Capital Partners Group
- Denham Capital
- EagleTree Capital
- The Energy & Minerals Group
- Equistone Partners Europe Limited
- Evergreen Pacific Partners GP LLC
- First Reserve Corporation
- GoldPoint Partners LLC
- Hahn & Company
- HgCapital
- Huntsman Gay Global Capital LLC
- Incline Management Corp
- IPC Advisors
- K4 Capital Advisors
- Landmark Partners
- Milestone Partners
- Morgan Stanley
- New Mountain Investments
- NGP Energy Capital Management
- Odyssey Investment Partners LLC
- Orchid Asia
- PAI Europe
- Palladium Equity Partners
- Partners Group Mgt VI LTD
- Permira
- Platinum Equity Capital Partners
- Portfolio Advisors, LLC
- StepStone Group
- Sterling Partners
- Strategic Partners
- Trilantic Capital Management, LLC
- Webster Capital Management, LLC

Special Situations Fund Managers

- Apollo Global Management, LLC
- Arrowhead Mezzanine
- Avenue Capital Group
- Black Diamond Capital Management, LLC
- Cerberus Capital Management, LP
- Clearlake Capital Group, LP
- Gold Hill Venture Lending 03, LLC
- GoldPoint Partners, LLC
- Oaktree Capital Management LP
- Searchlight Capital Partners, LP
- Tulco Management, LLC.
- Venor Capital Management, LP
- Versa Capital Management, LLC
- Windjammer Capital Investors

Custodian Bank

- The Bank of New York Mellon Corporation

Securities Lending Agent

- Deutsche Bank AG

Investment Accounting Application Service Provider

- STP Investment Services, LLC

Proxy Voting Agent

- Glass, Lewis & Co., LLC

General Investment Consultant

- Aon Hewitt Investment Consulting (AHIC)

Private Markets Investment Consultant

- Hamilton Lane Advisors, LLC

Real Estate Investment Consultant

- Hamilton Lane Advisors, LLC.

Hedge Fund Consultant

- Aksia, LLC

Risk Management System

- BlackRock Solutions